

CLAIMS

What is claimed is:

- 1 1. A method comprising:
2 intercepting a request from a user for a web page, the user connected to a port of a
3 packet forwarding device that prevents the user from accessing a network coupled to the
4 forwarding device;
5 directing the user to a network login page;
6 authenticating the user; and
7 allowing the user to access the network when the user is authenticated.
- 1 2. The method of claim 1, wherein intercepting a request from a user comprises
2 intercepting a HyperText Transfer Protocol (HTTP) request from the user.
- 1 3. The method of claim 2, further comprising receiving a Domain Name Service (DNS)
2 request to translate a domain name specified in the HTTP request into an Internet Protocol (IP)
3 address.
- 1 4. The method of claim 3, further comprising proxying the DNS request to a DNS server.
- 1 5. The method of claim 4, further comprising receiving a response from the DNS server
2 with a DNS-resolved IP address.
- 1 6. The method of claim 5, further comprising sending the DNS-resolved IP address to the
2 user.

1 7. The method of claim 6, further comprising intercepting a request from the user directed
2 to the DNS-resolved IP address.

1 8. The method of claim 7, wherein directing the user to a network login page comprises
2 responding to the user with a redirect to a Uniform Resource Locator (URL) address for the
3 network login page.

1 9. The method of claim 8, further comprising receiving a DNS request from the user to
2 translate a domain name for the network login page into an IP address.

1 10. The method of claim 9, further comprising responding to the user with the IP address of
2 the packet forwarding device.

1 11. The method of claim 10, further comprising receiving from the user a request to the IP
2 address of the packet forwarding device.

1 12. The method of claim 11, further comprising responding to the user with the network
2 login page.

1 13. The method of claim 12, further comprising receiving an authentication request from
2 the user with user identification data.

1 14. The method of claim 13, wherein authenticating the user comprises parsing the
2 authentication request and forwarding the authentication request to an authentication server.

1 15. The method of claim 14, wherein parsing the authentication request and forwarding the
2 authentication request to an authentication server comprises creating a packet with the user

3 identification data in accordance with the RADIUS communications protocol and forwarding
4 the RADIUS packet to a RADIUS server.

1 16. The method of claim 15, further comprising receiving a response from the RADIUS
2 server to indicate whether the user identification data is authentic.

1 17. The method of claim 1, wherein allowing the user to access the network when the user
2 is authenticated comprises unblocking the port of the packet forwarding device to allow the
3 user to access the network when the user is authenticated.

1 18. An apparatus comprising:
2 a packet forwarding device coupled to a network, the packet forwarding device having
3 a port that prevents a user connected to the port from accessing the network until the user is
4 authenticated; and
5 an authenticator discovery controller coupled to the packet forwarding device to
6 intercept a request from the user for a web page and direct the user to a network login page for
7 authentication.

1 19. The apparatus of claim 18, further comprising a network login controller coupled to the
2 packet forwarding device to authenticate the user and allow the user to access the network
3 when the user is authenticated.

1 20. The apparatus of claim 19, wherein the packet forwarding device having a port that
2 prevents a user connected to the port from accessing the network comprises the packet
3 forwarding device having a blocked port that prevents a user connected to the port from
4 accessing the network.

1 21. The apparatus of claim 20, wherein the network login controller to unblock the port of
2 the packet forwarding device when the user is authenticated.

1 22. The apparatus of claim 21, wherein the authenticator discovery controller to further
2 receive a Domain Name Service (DNS) request from the user and to proxy the DNS request to
3 a DNS server to translate a domain name into an Internet Protocol (IP) address.

1 23. The apparatus of claim 18, wherein the packet forwarding device is a switch.